

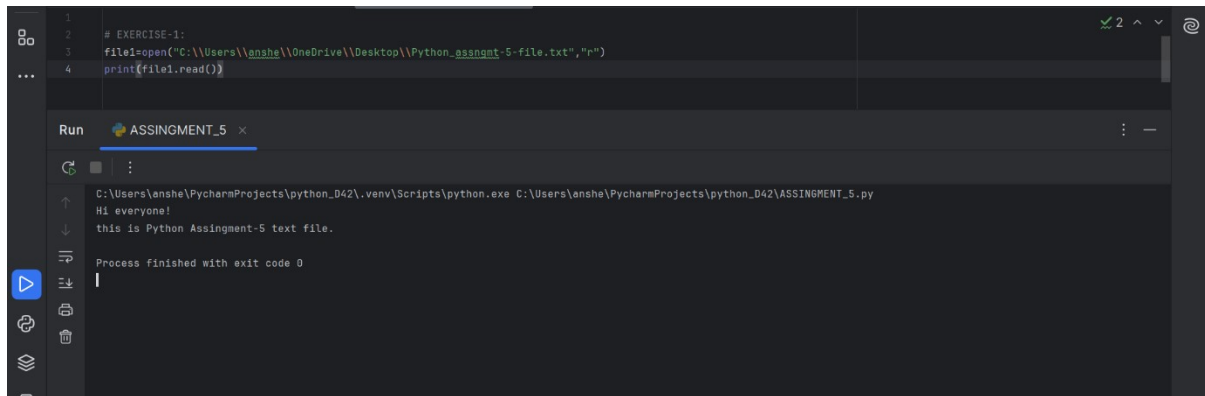
Exercise 1:

Write a Python program to read a file and display its contents

Code:

```
file1=open("C:\\Users\\anshe\\OneDrive\\Desktop\\Python_assngmt-5-  
file.txt","r")  
print(file1.read())
```

Result:

A screenshot of a Python IDE interface. The top pane shows a Python script with four lines: a comment '# EXERCISE-1:', and three lines of code: 'file1=open("C:\\Users\\anshe\\OneDrive\\Desktop\\Python_assngmt-5-file.txt","r")', 'print(file1.read())', and a closing parenthesis. The bottom pane is titled 'Run' and shows the output of the program: 'Hi everyone!' followed by 'this is Python Assignment-5 text file.' on the next line. Below the output, it says 'Process finished with exit code 0'. The IDE has a dark theme and various icons on the left sidebar.

Exercise 2:

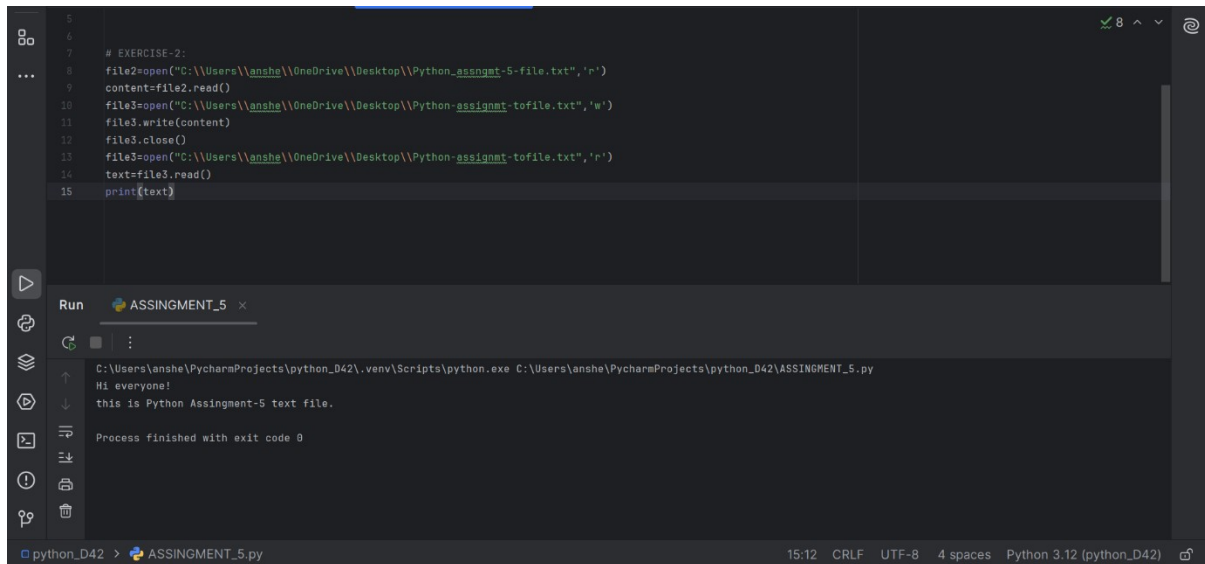
Write a Python program to copy the contents of one file to another file.

Code:

```
file2=open("C:\\Users\\anshe\\OneDrive\\Desktop\\Python_assngmt-5-  
file.txt",'r')  
content=file2.read()  
file3=open("C:\\Users\\anshe\\OneDrive\\Desktop\\Python-assignmt-  
tofile.txt",'w')  
file3.write(content)  
file3.close()  
file3=open("C:\\Users\\anshe\\OneDrive\\Desktop\\Python-assignmt-
```

```
tofile.txt",'r')
text=file3.read()
print(text)
```

Result:

A screenshot of a Python IDE interface. The top pane shows a Python script with the following code:

```
5
6
7 # EXERCISE-2:
8 file2=open("C:\\Users\\anshe\\OneDrive\\Desktop\\Python_assngmt-5-file.txt",'r')
9 content=file2.read()
10 file3=open("C:\\Users\\anshe\\OneDrive\\Desktop\\Python-assngmt-tofile.txt",'w')
11 file3.write(content)
12 file3.close()
13 file3=open("C:\\Users\\anshe\\OneDrive\\Desktop\\Python-assngmt-tofile.txt",'r')
14 text=file3.read()
15 print(text)
```

The bottom pane shows the output of the script:

```
Run ASSINGMENT_5 x
C:\\Users\\anshe\\PycharmProjects\\python_D42\\.venv\\Scripts\\python.exe C:\\Users\\anshe\\PycharmProjects\\python_D42\\ASSINGMENT_5.py
Hi everyone!
this is Python Assingment-5 text file.
Process finished with exit code 0
```

The status bar at the bottom indicates the file is 'ASSINGMENT_5.py' in the 'python_D42' directory, using Python 3.12.

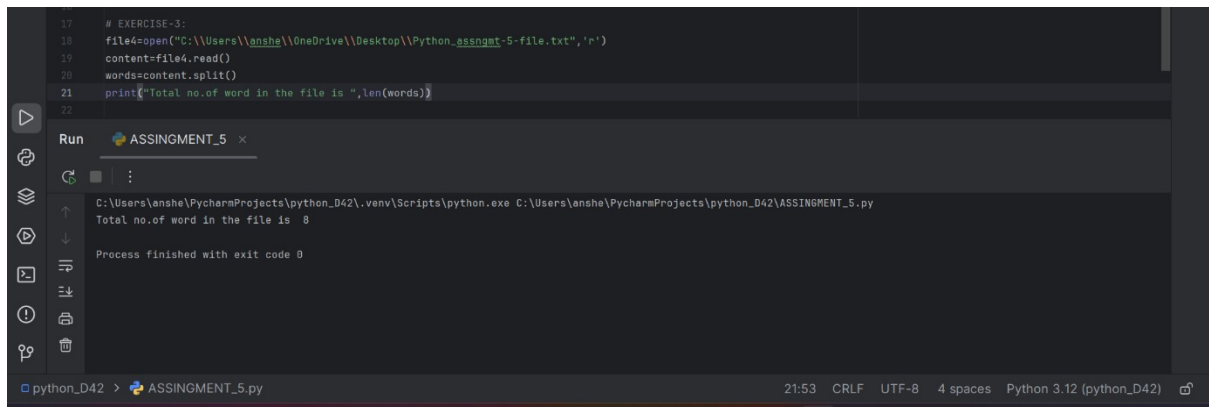
Exercise 3:

Write a Python program to read the content of a file and count the total number of words in that file.

Code:

```
file4=open("C:\\Users\\anshe\\OneDrive\\Desktop\\Python_assngmt-5-
file.txt",'r')
content=file4.read()
words=content.split()
print("Total no.of word in the file is ",len(words))
```

Result:



The screenshot shows a PyCharm IDE window with a Python script and its execution output. The script, located at `C:\Users\anshe\OneDrive\Desktop\Python_assignment-5-file.txt`, reads the content of a file and prints the total number of words. The output shows that the total number of words is 8.

```
17 # EXERCISE-3:
18 file4=open("C:\\Users\\anshe\\OneDrive\\Desktop\\Python_assignment-5-file.txt",'r')
19 content=file4.read()
20 words=content.split()
21 print("Total no. of word in the file is ",len(words))
22
```

Run ASSINGMENT_5

```
C:\Users\anshe\PycharmProjects\python_D42\.venv\Scripts\python.exe C:\Users\anshe\PycharmProjects\python_D42\ASSINGMENT_5.py
Total no. of word in the file is 8
Process finished with exit code 0
```

python_D42 > ASSINGMENT_5.py 21:53 CRLF UTF-8 4 spaces Python 3.12 (python_D42)

Exercise 4:

Write a Python program that prompts the user to input a string and converts it to an integer. Use try-except blocks to handle any exceptions that might occur.

Code:

```
input=input("enter a string:")
```

```
try:
```

```
    int1=int(input)
```

```
    print(int1)
```

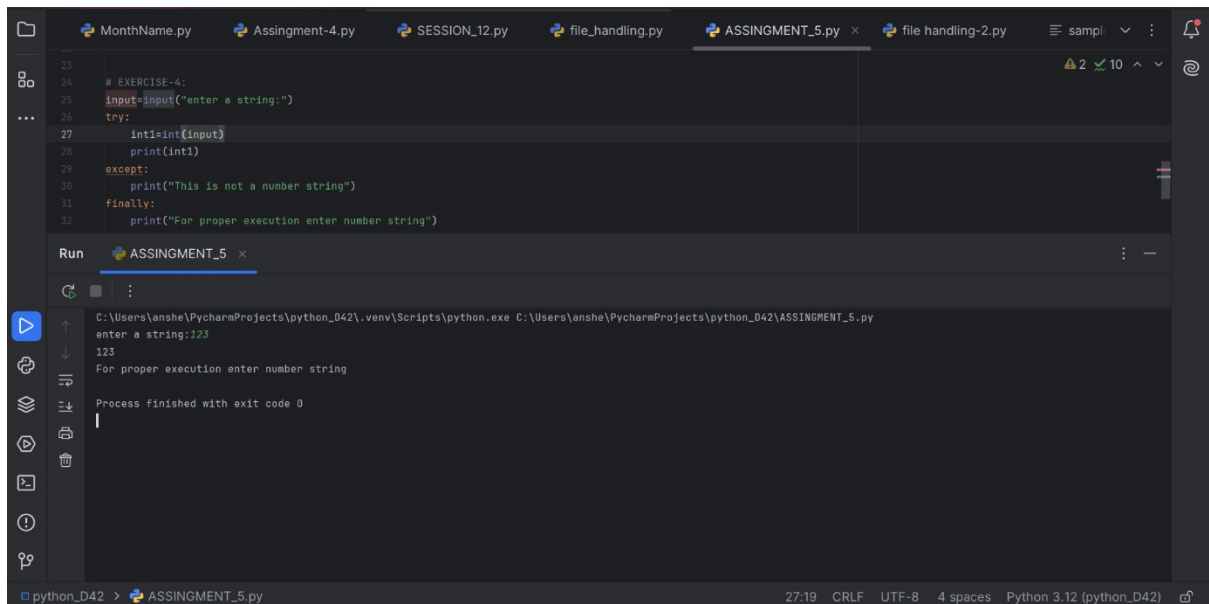
```
except:
```

```
    print("This is not a number string")
```

```
finally:
```

```
    print("For proper execution enter number string")
```

Result:



The screenshot shows the PyCharm IDE interface. The top toolbar contains icons for file operations, search, and other IDE functions. The main editor window displays a Python script with the following code:

```
23 # EXERCISE-4:
24 input=input("enter a string:")
25 try:
26     int1=int(input)
27     print(int1)
28 except:
29     print("This is not a number string")
30 finally:
31     print("For proper execution enter number string")
32
```

Below the editor, the 'Run' tab is active, showing the execution output:

```
C:\Users\anshe\PycharmProjects\python_D42\.venv\Scripts\python.exe C:\Users\anshe\PycharmProjects\python_D42\ASSINGMENT_5.py
enter a string:123
123
For proper execution enter number string
Process finished with exit code 0
```

The status bar at the bottom indicates the file is 'python_D42 > ASSINGMENT_5.py', the time is 27:19, and the encoding is CRLF, UTF-8, 4 spaces, Python 3.12 (python_D42).

Exercise 5:

Write a Python program that prompts the user to input a list of integers and raises an exception if any of the integers in the list are negative.

Code:

```
def get_positive_integer_list():
```

```
    while True:
```

```
        try:
```

```
            num = int(input("enter the list element:"))
```

```
            if num <= 0:
```

```
                raise ValueError("The negative list element not allowed !")
```

```
            return num
```

```
        except ValueError as e:
```

```
            print(f"Error {e}")
```

```
try:
```

```
    num_elements=int(input("Enter the number of elemnets:"))
```

```
    if num_elements<=0:
```

```
        raise ValueError("Number of elements should be positive integer.")
```

```
    positive_list=[]
```

```

for _ in range(num_elements):
    positive_list.append(get_positive_integer_list())

print("Positive integer list ",positive_list)
except ValueError as e:
    print(f"Error is {e}")

```

Result:

```

38 def get_positive_integer_list():
39     while True:
40         try:
41             num = int(input("enter the list element:"))
42             if num <= 0:
43                 raise ValueError("The negative list element not allowed !")
44             return num
45         except ValueError as e:
46             print(f"Error {e}")
47
48     try:
49         num_elements=int(input("Enter the number of elements:"))
50         if num_elements<=0:
51             raise ValueError("Number of elements should be positive integer.")
52         positive_list=[]
53         for _ in range(num_elements):
54             positive_list.append(get_positive_integer_list())
55
56         print("Positive integer list ",positive_list)
57     except ValueError as e:
58         print(f"Error is {e}")
59

```

```

C:\Users\anshe\PycharmProjects\python_D42\.venv\Scripts\python.exe C:\Users\anshe\PycharmProjects\python_D42\ASSINGMENT_5.py
Enter the number of elements:5
enter the list element:6
enter the list element:4
enter the list element:3
enter the list element:2
enter the list element:-1
Error The negative list element not allowed !
enter the list element:7
Positive integer list [6, 4, 3, 2, 7]

Process finished with exit code 0

```

Exercise 6:

Write a Python program that prompts the user to input a list of integers and computes the average of those integers. Use try-except blocks to handle any exceptions that might occur. use the finally clause to print a message indicating that the program has finished running.

Code:

```

def get_positive_integer():
    while True:

```

```

try:
    num=int(input("Enter the list elements:"))
    if num<=0:
        raise ValueError("The number should not less than zero!")
    return num
except ValueError as e:
    print(f"Error:{e}")

```

```

len_list=int(input("Enter the number of list elements:"))
positive_list=[]
for _ in range(len_list):
    positive_list.append(get_positive_integer())

```

```

try:
    Average=sum(positive_list)/len(positive_list)
    print("Average of list:",Average)
except:
    print("Unexpected error occur in the Average")

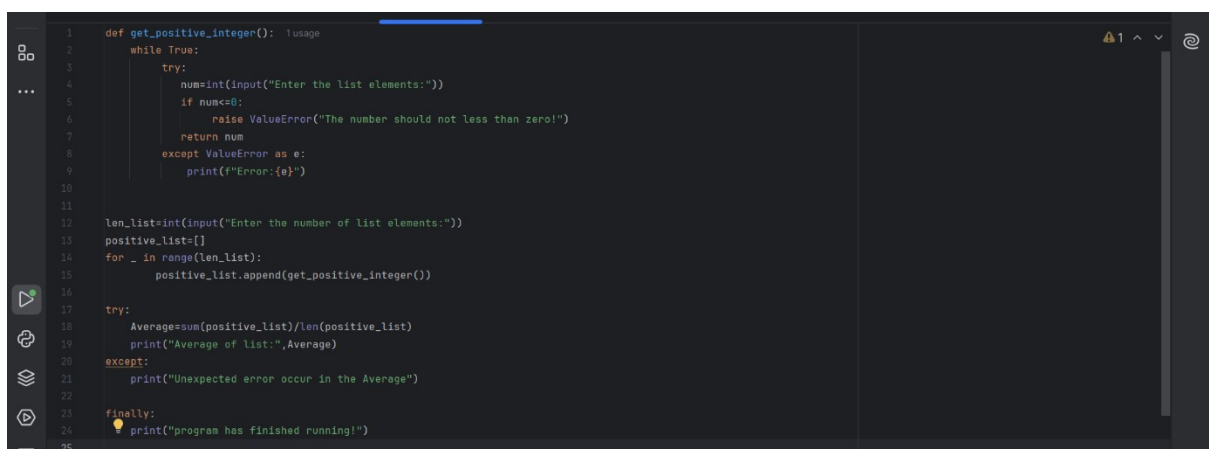
```

```

finally:
    print("program has finished running!")

```

Result:



```

1  def get_positive_integer():
2      while True:
3          try:
4              num=int(input("Enter the list elements:"))
5              if num<=0:
6                  raise ValueError("The number should not less than zero!")
7              return num
8          except ValueError as e:
9              print(f"Error:{e}")
10
11
12  len_list=int(input("Enter the number of list elements:"))
13  positive_list=[]
14  for _ in range(len_list):
15      positive_list.append(get_positive_integer())
16
17  try:
18      Average=sum(positive_list)/len(positive_list)
19      print("Average of list:",Average)
20  except:
21      print("Unexpected error occur in the Average")
22
23  finally:
24      print("program has finished running!")
25

```

```
C:\Users\anshe\PycharmProjects\python_D42\.venv\Scripts\python.exe C:\Users\anshe\PycharmProjects\python_D42\just.py
Enter the number of list elements:3
Enter the list elements:2
Enter the list elements:-5
Error:The number should not less than zero!
Enter the list elements:3
Enter the list elements:6
Average of list: 3.6666666666666665
program has finished running!

Process finished with exit code 0
```

```
C:\Users\anshe\PycharmProjects\python_D42\.venv\Scripts\python.exe C:\Users\anshe\PycharmProjects\python_D42\just.py
Enter the number of list elements:0
Unexpected error occur in the Average
program has finished running!

Process finished with exit code 0
```

Exercise 7 :

Write a Python program that prompts the user to input a filename and writes a string to that file. Use try-except blocks to handle any exceptions that might occur and print a welcome message if there is no exception occurred.

Code:

try:

```
name=input("Enter the file_name=")
with open(name,'w') as file1:
    string=input("Enter the file content:")
    file1.write(string)
    file1.close()
print(f"Welcome to the {name} file")
```

except:

```
print("Unexpected error occur")
```

Result:

```
1 try:
2     name=input("Enter the file_name=")
3     with open(name,'w') as file1:
4         string=input("Enter the file content:")
5         file1.write(string)
6         file1.close()
7     print(f"Welcome to the {name} file")
8
9
10 except:
11     print("Unexpected error occur")
```

Run just x ASSINGMENT_5 x

C:\Users\anshe\PycharmProjects\python_D42\.venv\Scripts\python.exe C:\Users\anshe\PycharmProjects\python_D42\just.py

Enter the file_name=python-string
Enter the file content:/this is basic python file
Welcome to the python-string file

Process finished with exit code 0

python_D42 Version control

Current File

file_handling.py ASSINGMENT_5.py just.py x file handling-2.py sample.txt BodyMassIndex.py session_9.py

```
1 try:
2     name=input("Enter the file_name=")
3     with open(name,'w') as file1:
4         string=input("Enter the file content:")
5         file1.write(string)
6         file1.close()
7     print(f"Welcome to the {name} file")
8
9
10 except:
11     print("Unexpected error occur")
```

Run just x ASSINGMENT_5 x

C:\Users\anshe\PycharmProjects\python_D42\.venv\Scripts\python.exe C:\Users\anshe\PycharmProjects\python_D42\just.py

Enter the file_name=c:\invalid\path\file.txt
Unexpected error occur

Process finished with exit code 0